**Transfer of discarded technology**

2113. SHRI SANTOSH BAGRODIA: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the developed nations are transferring their discarded technology to the developing nations including India;

(b) if so, what are the details thereof; and

(c) what are the fields in which such discarded technology was already sold to India?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) to (c) Information is being collected and will be laid on the Table of the House.

**Reviewing Indo-Russian Scientific Cooperation**

2114. SHRI KRISHNA KUMAR BIRLA: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the entire range of Indo-Russian Scientific Cooperation is under overhaul;

(b) if so, whether several scientific projects are also likely to be dropped; and

(c) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) to (c) A meeting of the Joint Council for the Integrated Long Term Programme of Cooperation (ILTP) in Science and Technology between Russia and India was held in Moscow on April 17-18 1992. It was emphasised that the main thrust of our cooperation will continue to be the realisation of scientific ideas towards the development of new technologies, generation of new equipment and techniques as well as advanced materials required for the development of the economics of both the countries. In view of the financial constraints, the projects already identified jointly between India and Russia will be priorotised. The Indo-Russian cooperation will be made broad based with inter-institutional involvement. Joint cooperative research and projects will be organised between various scientific organisations and institutions of India and Russia, including educational, R&D and production centres. Alongside, the existing mechanism of cooperation between the Indian National Science Academy and the Russian Academy of Sciences will continue to be utilised for promotion of joint work in basic science areas.

**Review of Vaccine Action Plan**

2115. SHRI B. K. HARIPRASAD: Will the PRIME MINISTER be pleased to state:

(a) whether Government's attention has been drawn to several disquieting news-reports linking polio vaccine with AIDS as reported in the Times of India dated the 8th April, 1992;

(b) whether Government will review its entire Biotechnology programme including Vaccine Action Plan and other similar projects in hand based on gene-recombination; and

(c) whether Government will appoint a high powered Task Force of non-official scientists to look into the matter independently ?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) Government is aware of the reports linking Polio Vaccine with AIDS; and the assumptions appear to be hypothetical.

(b) and (c) There is no proposal to review the Biotechnology programmes in the country which are formulated on the advice of Expert Advisory Committees and Task Forces. Involvement of the scientists from within the country and from outside is ensured. For specific programmes and activities, Expert

Advisory Committees undertake intensive and extensive examination and monitoring. The Indo-US Vaccine Action Programme is monitored through a high powered Apex Committee. Safety guidelines have been evolved which have to be followed strictly for pursuing any project based on recombinant DNA technology. An Apex Committee in the Ministry of Environment & Forests called the Genetic Engineering Approval Committee has to approve any trial or introduction of genetically engineered products in the country.

**Genetic tech for higher silk yield**

2116. SHRIMATI MIRA DAS:
SHRI SOM PAL:
SHRI RAM AWADHESH SINGH:
SHRI CHIMANBHAI MEHTA:

Will the PRIME MINISTER be pleased to state:

(a) whether genetic tech for higher silk yield is researched and develo ped by the Indian Institute of Science, Bangalore; if so, the details thereof;

(b) whether it is a fact that the traditional silkworms are being injected with the genes which make worms sturdier give more silk and withstand disease and environmental vagaries better; and what are the details thereof; and

(c) what is the ranking of India in the World as the silk producing country?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) and (b) Research has been initiated at the Indian Institute of Science, Bangalore in the direction of making transgenic silkworms with higher silk yield by the application of currently available methodologies of biotechnology.

Efforts to identify and isolate the gene(s) controlling sturdiness, silk yield and disease resistance in silkworm have been initiated. So far effective methods for gene transfer into silkworm are also not available. The work is till in its initial stages of R&D and it will take some time before the same is standardized at the laboratory level.

(c) India is the second largest silk producing country in the world after China with 12,665 MT (1990-91).

**वैज्ञानिकों के लिए प्राचीन भारतीय विज्ञान की जानकारी रखना**

2117. **श्री कृष्ण लाल शर्मा :** क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि :

(क) क्या तीन महीने से अधिक अवधि के लिये विदेश भेजे जाने वाले वैज्ञानिकों को प्राचीन भारतीय विज्ञान के इतिहास की जानकारी सुनिश्चित करने के लिये सरकार की कोई योजना है;

(ख) भारतीय विज्ञान के इतिहास पर इंडियन नेशनल साइंस तथा विज्ञान और प्रौद्योगिकी विभाग द्वारा किये गये कार्य का ब्यौरा क्या है ;

(ग) क्या किये गये कार्य तथा अनुसंधान संबंधी सामग्री देश के सभी प्रौद्योगिकी संबंधी संस्थाओं और विश्व विद्यालयों में उपलब्ध है; और

(घ) क्या विदेश जाने वाले वैज्ञानिकों के लिये कोई सघन पाठयक्रम आयोजित किया जाता है और क्या यह पाठयक्रम अनिवार्य होता है या नहीं ?

**कार्मिक, लोक शिकायत और पेंशन मंत्रालय में राज्य मंत्री (श्रीमती मारग्रेट आल्वा) :** (क) और (घ) जी हां । लम्बी अवधि के लिए विदेश जाने वाले भारतीय वैज्ञानिकों को प्राचीन भारतीय विज्ञान के संबंधित पहलुओं के बारे में जानकारी दी जाती है।

(ख) और (ग) भारतीय विज्ञान के इतिहास के बारे में कुछेक विशिष्ट